NÁVOD NA MONTÁŽ KONŠTRUKCIE DP-DTHWE-WZ

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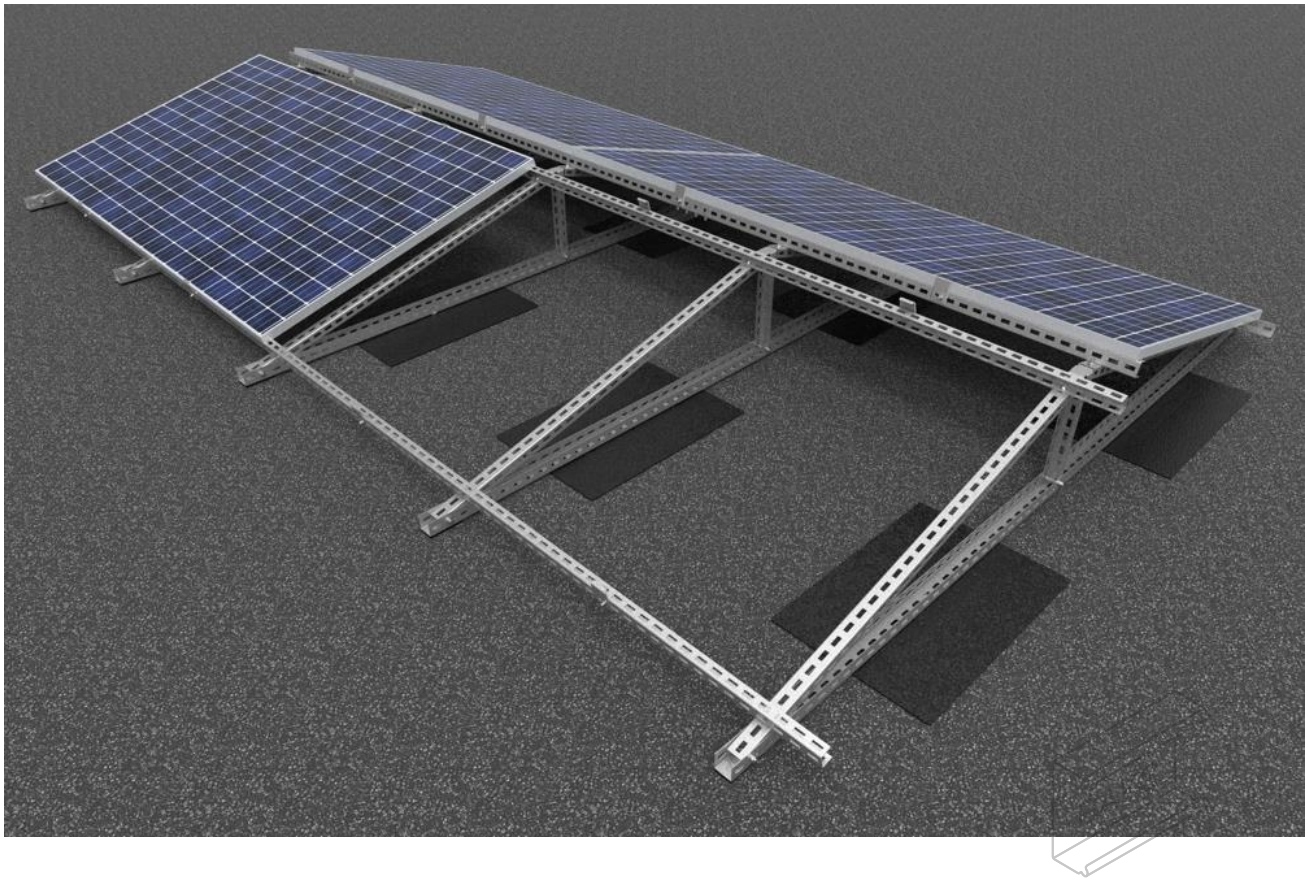
Poľsko

Oceľová konštrukcia na plochú strechu v lepenej verzii.

Montáž FV panelov vo vodorovnom usporiadaní (na ležato).



1. Potrebné náradie na montáž konštrukcie

- Imbusový kľúč veľkosti 6
- Aku skrutkovač s reguláciou otáčok a krútiaceho momentu
- Imbusový bit veľkosti 6 do skrutkovača
- Vidlicové kľúče 13, 15, 17 mm
- Račňa s nástrčnými kľúčmi 13, 15, 17 mm
- Predĺženie 100–120 mm pre nástrčné kľúče
- Gumené kladivo
- Momentový kľúč, rozsah 10–45 Nm

2. Všeobecné informácie:

- Konštrukciu možno použiť vo veterných a snehových oblastiach podľa noriem STN EN 1991-1-3 a STN EN 1991-1-4.
- Pred montážou konštrukcie si prečítajte návod na montáž fotovoltických panelov. Hodnoty balastu určí individuálne oprávnený statik
- Skrutky SAM8x...E a matice NRM8PV uťahujte momentom 12–14 Nm
- Pri uťahovaní skrutiek SGKFM8x20 a SGKFM10x20PV držte hlavu skrutky rukou tak, aby sa podložka zaprela o steny otvoru, potom skrutku pomaly doťahujte skrutkovačom, kým sa v otvore nezablokuje. Nakoniec ju dotiahnite momentom: M8 – 22 Nm; M10 – 42 Nm
- Skrutky SMM10x...F uťahujte momentom 30 Nm

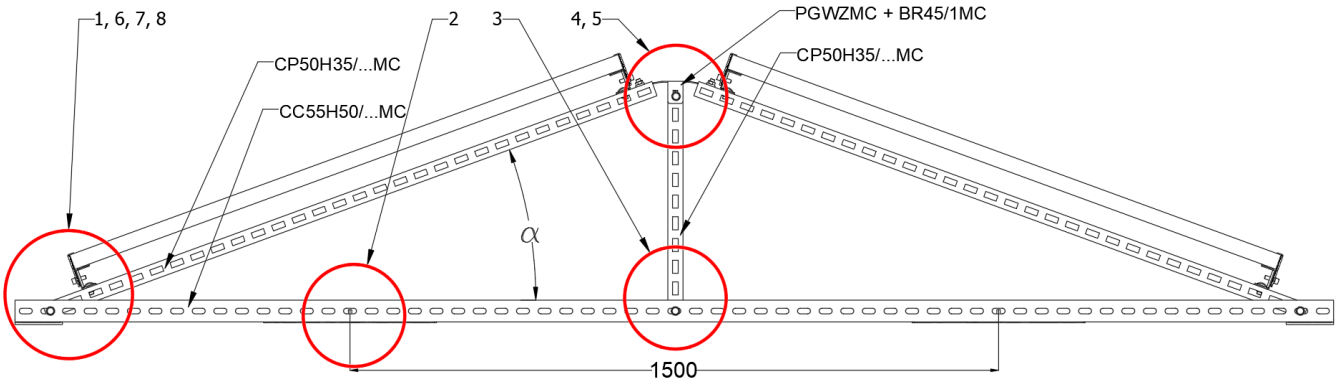


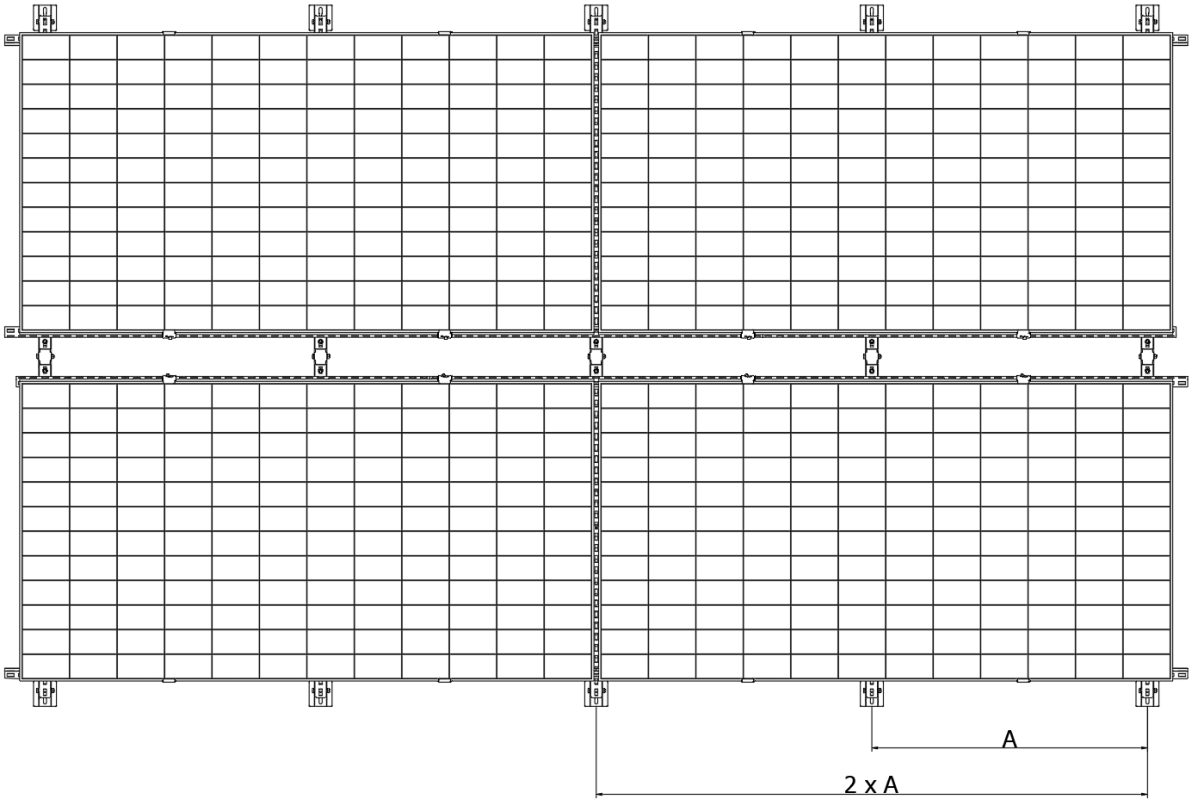
3. Zoznam prvkov konštrukcie DP-DTHWE-WZ

Nr	Názov	Symbol výrobku	Účel v konštrukcii
1	C-profil	CC55H50/...MC	Hlavný profil
2	C-profil	CP50H35/...MC	Montážny profil konštrukcie
3	C-profil	CC50H35/...MC	Profil nesúci panely
4	Spojka C-profilu	LCCW50H35MC	Spojenie C-profilov CC50H35/...MC
5	Skrutka so šesťhrannou hlavou	SMM10x70F	Skrutka spájajúca nosné C-profily konštrukcie
6	Podložka	PP10F	Podložka
7	Horná podložka východ-západ	PGWZMC	Montáž konštrukcie vo variante východ-západ.
8	Krajný držiak	BUFMC	Montážny držiak panelov
9	Skrutka	SAM8x25E	Skrutka na upevnenie držiakov a veterných clon
10	Rombová matica	NRKM8PV	Rombová matica
11	Pružná podložka	PS8E	Pružná podložka
12	Veľkoplošná podložka	PW8E	Veľkoplošná podložka
13	Skrutka s guľatou hlavou	SGKFM10x20	Skrutka + matica s límcom
14	Oceľová montážna doska	SPM1	Lepená doska
15	Podložka profilu s antivibračnou	PC100C	Zabraňuje tlaku koncov oceľových profilov na strechu antivibračná guma plášť



4. Montáž konštrukcie DP-DTHWE-WZ





Kombinácia veternej „W“ a snehovej „S“* oblasti	Max. vzdialenosť nasledujúcich rámov „A“
1W-1S; 1W-2S; 1W-3S	2,0 m
1W-4S	1,8 m
2W-2S; 2W-3S	1,4 m
3W-1S	1,6 m
3W-3S	1,3 m
3W-5S	1,1 m
Iné kombinácie oblastí	Určí sa individuálne po konzultácii

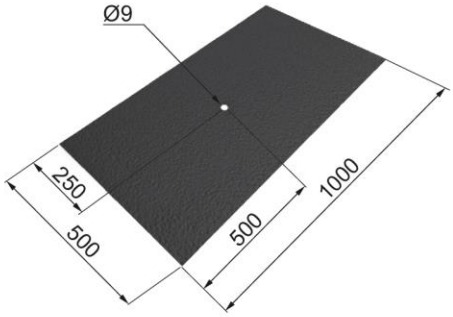
Tabuľka 1 Montážna vzdialenosť nasledujúcich rámov fotovoltickej konštrukcie podľa kombinácie veternej a snehovej oblasti

*1. veterná oblasť do 300 m n. m.; 3. veterná oblasť do 500 m n. m.;

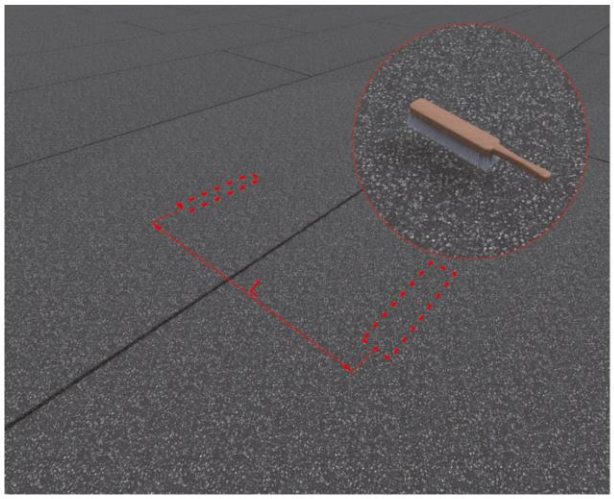
1. a 3. snehová oblasť do 300 m n. m.; 5. snehová oblasť do 500 m n. m.

BAKS

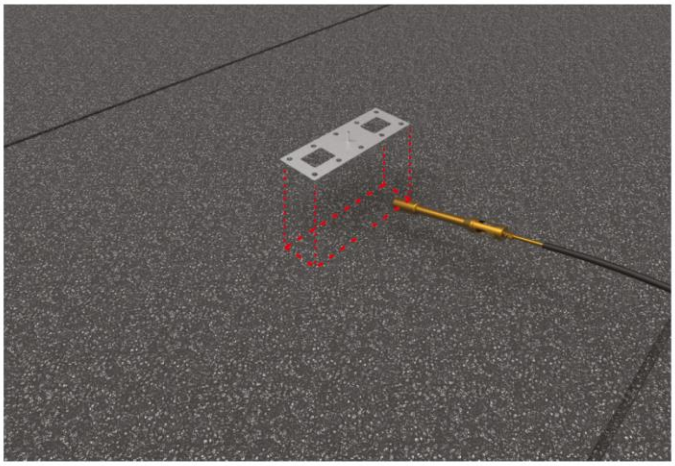
Assembly instructions for SPM1 Steel Fixing Plate to roofing felt
Note:
Requirements of the roofing felt to be used:
1) EN 12310-1 (tear strength) – min. 145N
2) EN 12311-1 (tensile strength) – min. 290N/50 mm
3) EN 12316-1 (peel strength of the joints) – min. 120N/50 mm
4) EN 12317-1 (shear strength of the joints) – min. 490N/50 mm



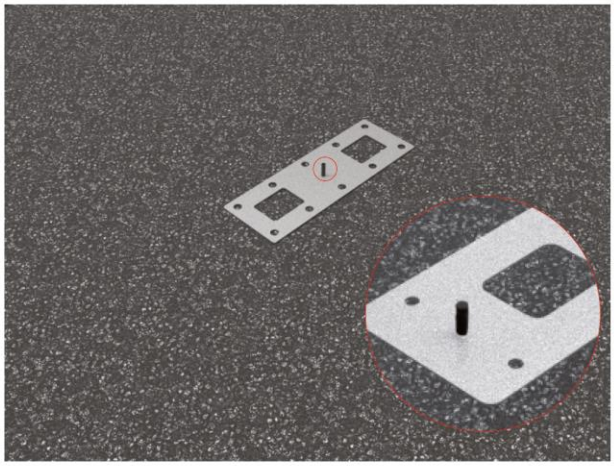
1. Before starting to install the SPM1 plates, cut out a fragment of roofing felt with minimum dimensions of 500 x 1000 mm, then cut out holes with a diameter of Ø9 mm in the locations of screws



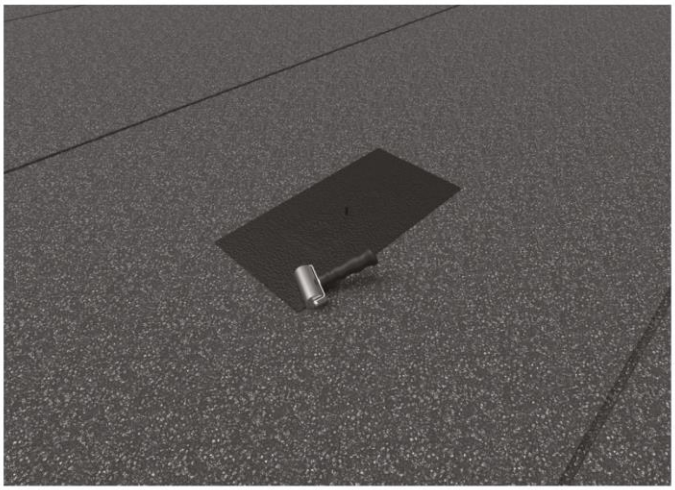
2. Measure the distance between the SPM1 plates, mark the points and then use a wire brush to clean the 500 x 1000 mm area of the roofing felt on the roof



3. On the designated area heat the surface in the size of a plate or slightly larger

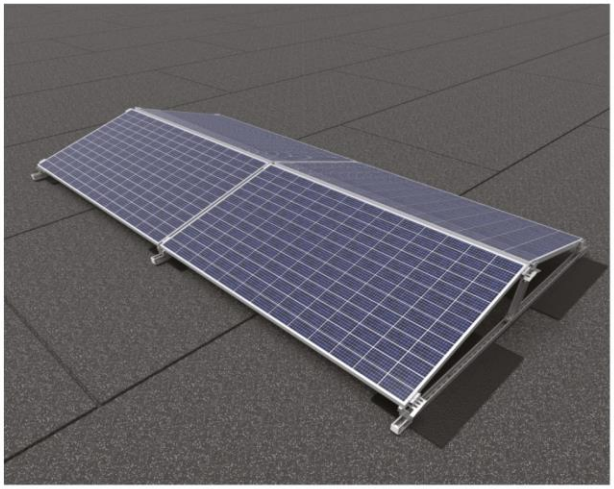


4. SPM1 plate should be placed on heated areas, pressed against prepared surface, protruding threads should be secured with NOP50 protection cap



5. Warm up the prepared roofing felt, cover the plate with it and then press it with a roofing roller in the locations of the holes

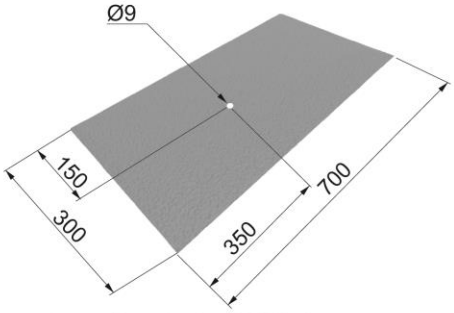
6. Warm up the side of the roofing felt and the surface and at the same time press the roofing felt with a roofing roller, repeat the operation for each side until the plate is fully fixed to the roof surface



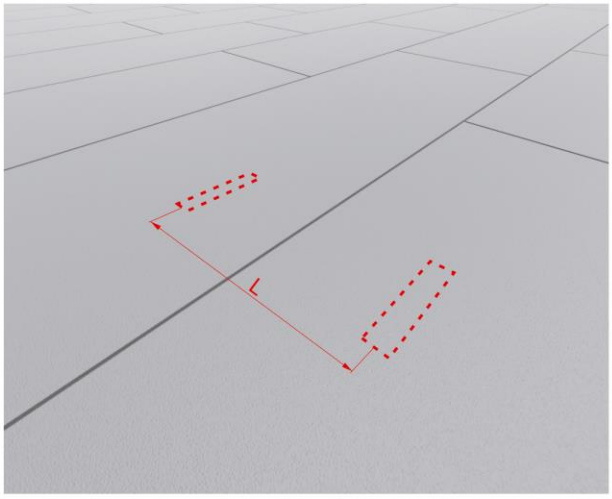
7. Correctly installed structure using SPM1 plate and DP-DNHWE-WZ mounting system



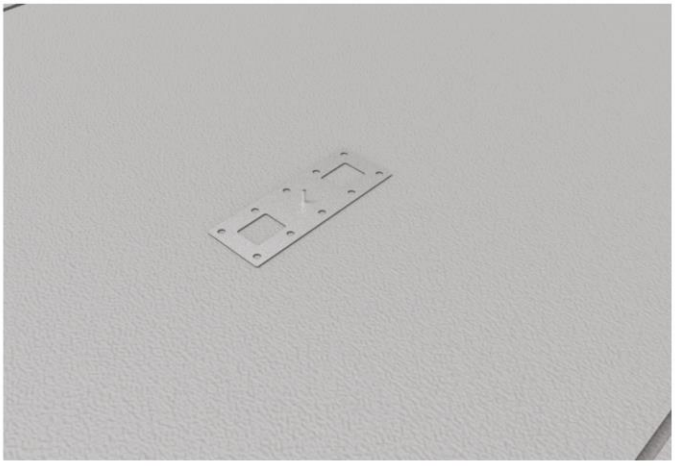
Assembly instructions for SPM1 Steel Fixing Plate to membrane
Note:
Requirements of the membrane to be used: PVC, ECB, EPO min 1.2 mm thick:
1) EN 12310-2 (tear strength) – min. 105N
2) EN 12311-2 (tensile strength) – min. 505N/50 mm
3) EN 12316-2 (peel strength of the joints) – min. 145N/50 mm
4) EN 12317-2 (shear strength of the joints) – min. 445N/50 mm



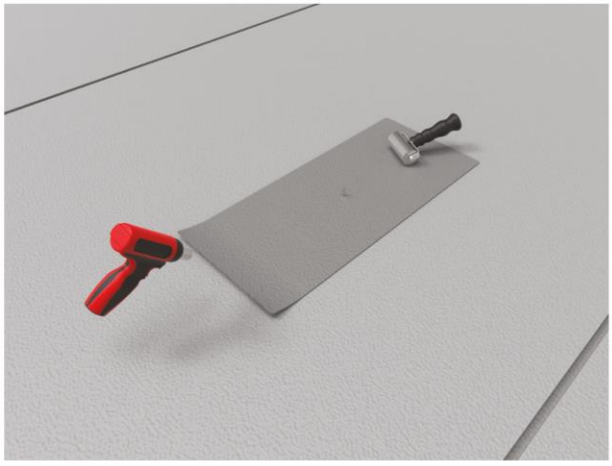
1. Before starting to install the SPM1 plates, cut out a fragment of membrane with minimum dimensions of 300 x 700 mm, then cut out holes with a diameter of Ø9 mm in the locations of screws, finally round the corners of the membrane.



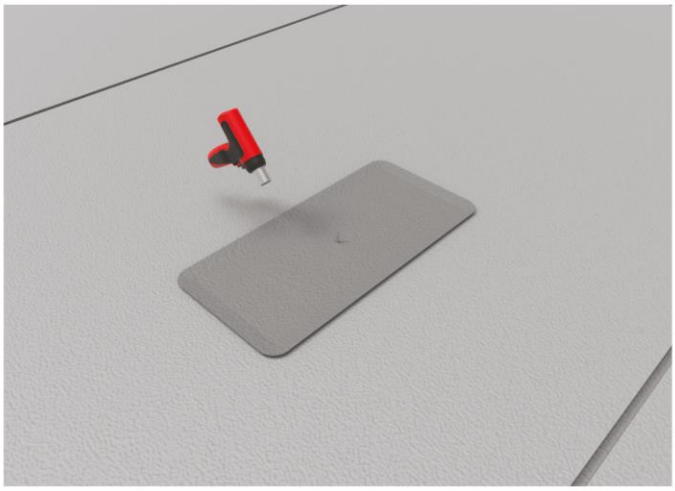
2. Measure the distance between the SPM1 plates, then mark the points.



3. Place the SPM1 plate on the designated place

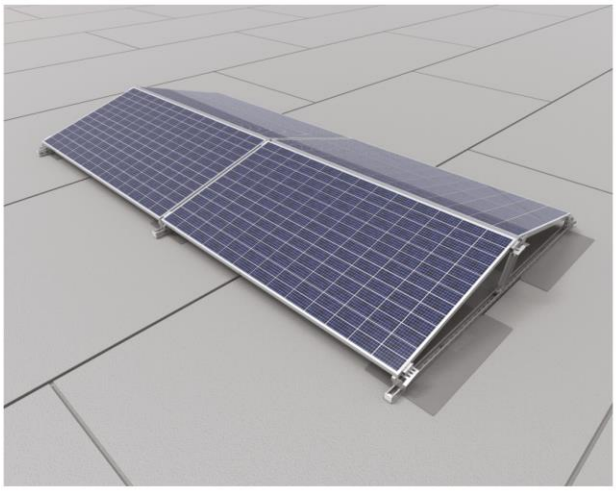


4. Cover the SPM1 plate with the prepared membrane and start the installation with a manual welding machine. Initially weld an hole of 60 x 80 mm, after proper heating press the membrane with a roofing roller. Repeat for the remaining holes.



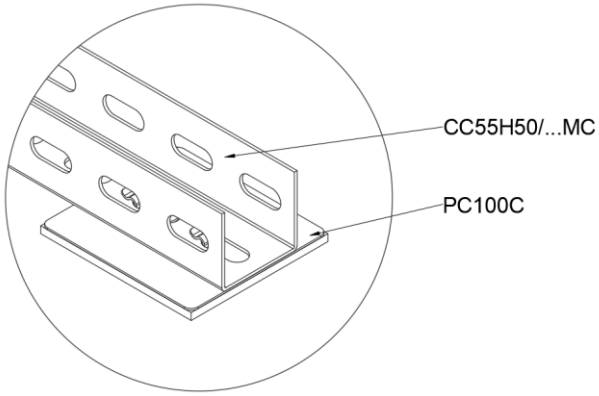
5. Once the holes are welded, weld all sides around the SPM1 plate.

6. The SPM1 plate glued to the membrane is a basis for a structure for PV Installations.

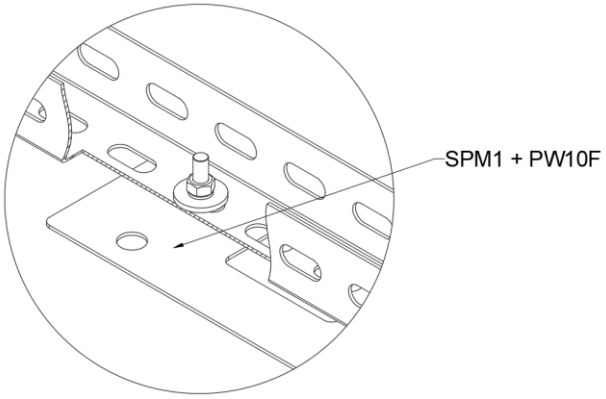


7. Correctly installed structure using SPM1 plate and DP-DNHWE-WZ mounting system

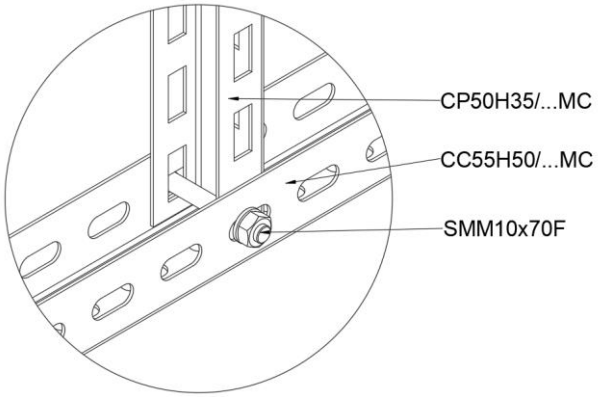
1


CC55H50/...MC
PC100C

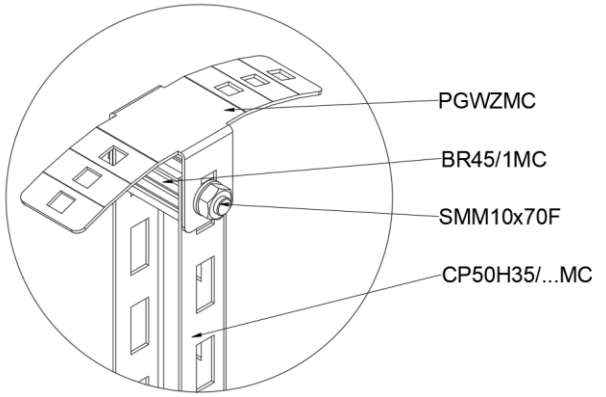
2


SPM1 + PW10F

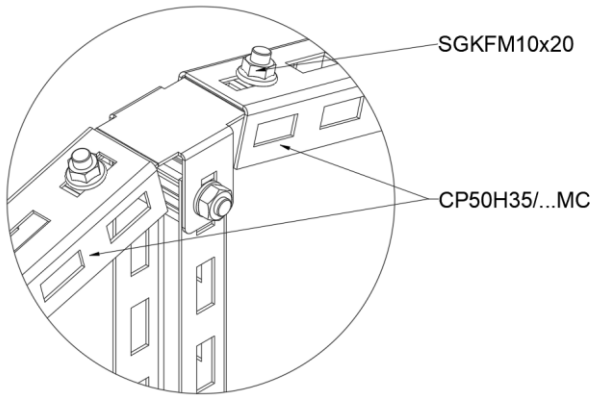
3


CP50H35/...MC
CC55H50/...MC
SMM10x70F

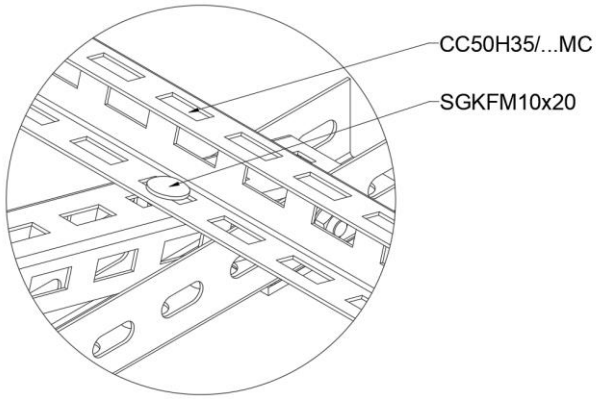
4


PGWZMC
BR45/1MC
SMM10x70F
CP50H35/...MC

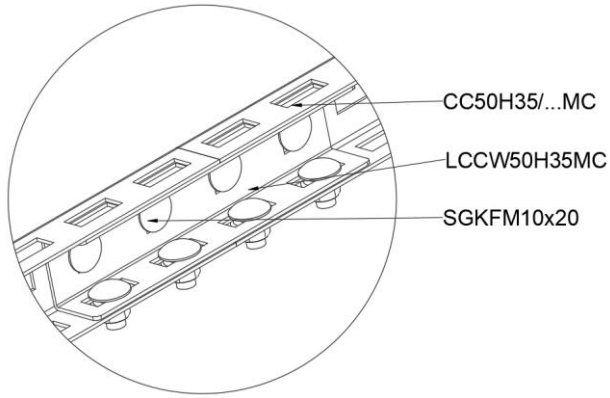
5


SGKFM10x20
CP50H35/...MC

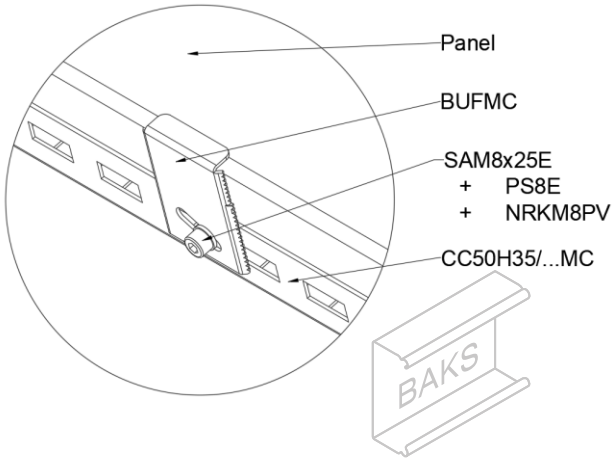
6


CC50H35/...MC
SGKFM10x20

7


CC50H35/...MC
LCCW50H35MC
SGKFM10x20

8


Panel
BUFMC
SAM8x25E
+ PS8E
+ NRKM8PV
CC50H35/...MC
BAKS